## **BIOLOGICAL NOTES ON ARIZONA HETEROPTERA.**

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The data following are culled from my field notes from September 1934 to June 1940. They include hibernation data, altitudes, food plants, etc., details to be worked eventually into a general picture. They are given for what they are—observations on the field.

Belonochilus numenius Say, a common denizen of sycamore in the East (*Platanus occidentalis*) and in the West (*Platanus racemosa*). This was taken at Tanque Verde (elevation about 3000 feet) on February 17; and again on the 19th at Madera (or White House) Canyon (elevation about 5000 feet) on the West slope of the Santa Rita Range. In both instances the bugs were hiding under loose bark, and quite active; and the trees were growing by running water. At Madera Canyon, at the same time, one *Crophius schwarzi* Van Duzee was found. Also, under dead sycamore bark at Tanque Verde was found abundance of *Mezira emarginata* Usinger.

Atriplex sp. in vacant lots in Tucson harbors abundance of *Thyanta rugulosa* Say and *T. brevis* Van Duzee from the first days of August on.

Lyageus circumlitus Stål came to light between June 16 and 23. A new record for Arizona (and apparently for the United States) is Lygaeus trux Stål, a Mexican species, one specimen being taken in Sabino Canyon, Santa Catalina Range and another in the foothills of the Santa Ritas, both at about 3500 to 4000 feet, on October 21 and November 2 respectively.

*Corimelaena extensa* Uhler is to be found throughout the summer in great numbers on tree tobacco (*Nicotiana glauca*). Commonly it gathers in small groups at the axils of the leaves, or else in twos and threes head down, in the seed capsules.

The tiny neidid *Pronotacantha annulata* Uhler is far from rare in Tucson during May. I have found it commonly on yellow columbine (*Aquilegia*) in my garden. Cultivated snapdragon (*Antirrhinum*) in gardens is a favorite harborage. It is most frequently found on the flowers, under the lip of the hood, adults in copulo and nymphs as well.

At Madera (White House) Canyon, the tingid *Teleonemia* nigrina Champion was found in great numbers on August 13, on the under side of the leaves of wild verbena. It was so abundant as to bleach the plant.